

CLAIMS

What is claimed is:

1. A method for optimizing compilation time of a program, the program including at least one block of code, said method comprising steps of:
 - 3 generating a current hash value for a block of code in the program;
 - 4 skipping optimization of the block of code if the current hash value equals a prior hash value; and
 - 6 storing the current hash value in the block of code if the hash value is not equal to the prior hash value for the block of code.

- 1 2. The method of claim 1, wherein the storing a hash value step further comprises:
 - 3 allocating area for the generated hash value.

- 1 3. The method of claim 1, further comprising:
 - 2 setting a scope of the least one block of code.

- 1 4. The method of claim 1, wherein the generating a hash value step further comprises:
 - 3 using a parameter in hashing function to generate the hash value, wherein the 4 parameter is selected from at least one of the group of a code stream, and a data stream.

1 5. The method of claim 1, further comprising the step of:
2 generating a notice when the hash value is not equal to a prior hash value for the
3 block of code.

1 6. A system for optimizing compilation time of a program, the program
2 including at least one block of code, comprising:
3 means for generating a hash value for a block of code in the program;
4 means for storing the hash value with the block of code if the hash value is not
5 equal to a prior hash value for the block of code; and
6 means for skipping optimization of the block of code if the hash value equals the
7 prior hash value.

1 7. The system of claim 6, wherein the storing means further comprises:
2 means for allocating area for the generated hash value..

1 8. The system of claim 6, further comprising:
2 means for setting a scope of the least one block of code.

1 9. The system of claim 6, wherein the hash value is generated using a
2 parameter in the block of code, wherein the parameter is selected from at least one of
3 the group of a code stream, and a data stream.

1 10. The system of claim 6, further comprising:
2 means for generating a notice when the hash value is not equal to a prior hash
3 value for the block of code.

1 11. A computer readable medium for optimizing compilation time of a
2 program, the program including at least one block of code, comprising:
3 logic for generating a hash value for a block of code in the program;
4 logic for storing the hash value with the block of code if the hash value is not
5 equal to a prior hash value for the block of code; and
6 logic for skipping optimization of the block of code if the hash value equals the
7 prior hash value.

1 12. The computer readable medium of claim 11, wherein said logic for
2 storing a hash value further comprises:
3 logic for allocating area for the generated hash value..

1 13. The computer readable medium of claim 11, further comprising:
2 logic for setting a scope of the least one block of code.

1 14. The computer readable medium of claim 11, wherein the hash value is
2 generated using a parameter in the block of code, wherein the parameter is selected from
3 at least one of the group of a code stream, and a data stream.

1 15. The computer readable medium of claim 11, further comprising:
2 logic for generating a notice when the hash value is not equal to a prior hash
3 value for the block of code.

1 16. A system for optimizing compilation time of a program, comprising:
2 a compiler that generates the least one block of code from the program; and
3 a compilation optimizer, wherein the compilation optimizer further comprises:
4 logic that generates a hash value for a block of code in the program;
5 logic that stores the hash value with the block of code if the hash value is
6 not equal to a prior hash value for the block of code; and
7 logic that skips optimization of the block of code if the hash value equals
8 the prior hash value.

1 17. The system of claim 16, wherein the compilation optimizer further
2 comprises:
3 logic that allocates area for the generated hash value.

1 18. The system of claim 16, wherein the compilation optimizer further
2 comprises:
3 logic that sets a scope of the least one block of code.

1 19. The system of claim 16, wherein the hash value is generated using a
2 parameter in the block of code, wherein the parameter is selected from at least one of
3 the group of a code stream, and a data stream.

- 1 20. The system of claim 16, wherein the compilation optimizer further
- 2 comprises:
- 3 logic that generates a notice when the hash value is not equal to a prior hash
- 4 value for the block of code.

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